

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An X-ray diagnostic apparatus, comprising:
an imaging system ~~that generates~~ configured to generate image data sets from shots by subjecting a patient to X-ray exposure;
a supporting mechanism ~~that supports~~ configured to support said imaging system in such a manner so as to be allowed to move relatively with respect to said patient;
a system controller ~~that controls~~ configured to control said imaging system and said supporting mechanism in such a manner that shots are repeated at each of a plurality of shot positions set discretely along a body axis of said patient; and
an image processing ~~portion unit~~ unit ~~that generates~~ configured to generate a given image data set covering a range wider than a field of view of said imaging system from said image data sets, comprising,
an addition processing unit configured to add up said image data sets at a same shot position and thereby generates an addition image data set, and
a joint processing unit configured to generate said given image data set by jointing said addition image data sets at different shot positions.

Claim 2 (Currently Amended): The X-ray diagnostic apparatus according to claim 1, wherein said image processing unit is configured to generate said given image data set [[is]] comprising one of a blood vessel extracted image data set [[or]] and a blood vessel enhanced image data set.

Claim 3 (Currently Amended): The X-ray diagnostic apparatus according to claim 1, wherein said image processing ~~portion unit~~ unit includes a subtraction processing ~~portion unit~~ unit [[that]] configured to subtract ~~subtracts~~ corresponding mask image data sets from said image data sets.

Claim 4 (Canceled).

Claim 5 (Canceled).

Claim 6 (Currently Amended): The X-ray diagnostic apparatus according to claim 1, wherein said image processing ~~portion~~ unit includes a peak hold processing ~~portion~~ unit that ~~generates~~ configured to generate a peak hold image data set from said image data sets at a same shot position.

Claim 7 (Currently Amended): The X-ray diagnostic apparatus according to claim 6, wherein said image processing ~~portion~~ unit includes a joint processing ~~portion~~ unit that ~~generates~~ configured to generate said given image data set by jointing said peak hold image data sets at different shot positions.

Claim 8 (Currently Amended): The X-ray diagnostic apparatus according to claim 1, wherein said system controller is configured to align said plurality of shot positions ~~are aligned~~ at a regular pitch, and the pitch is longer than a radius of the field of view of said imaging system and shorter than a diameter of the field of view of said imaging system.

Claim 9 (Currently Amended): The X-ray diagnostic apparatus according to claim 1, wherein said system controller is configured to repeat shots ~~are repeated~~ a predetermined number of times at each of said plurality of shot positions.

Claim 10 (Currently Amended): An X-ray diagnostic apparatus, comprising:
an imaging system ~~that generates~~ configured to generate image data sets from shots by subjecting a patient to X-ray exposure;
a supporting mechanism ~~that supports~~ configured to support said imaging system in such a manner so as to be allowed to move relatively with respect to said patient;

a system controller ~~that controls~~ configured to control said supporting mechanism in such a manner that said imaging system is repetitively moved and suspended in turn along a body axis of said patient, and ~~controls to control~~ said imaging system in such a manner that shots are repeated at each suspended position; and

an image processing ~~portion unit that generates~~ configured to generate a given image data set covering a range wider than a field of view of said imaging system from said image data sets, comprising,

a subtraction unit configured to subtract corresponding mask image data sets from said image data sets,

an addition processing unit configured to generate an addition image data set by adding up said image data sets at a same shot position, and

a joint processing unit configured to generate said given image data set by jointing said addition image data sets at different shot positions.

Claim 11 (Canceled).

Claim 12 (Canceled).

Claim 13 (Currently Amended): The X-ray diagnostic apparatus according to claim 10, wherein said image processing ~~portion unit includes~~ comprises:

a peak hold processing ~~portion unit that generates~~ configured to generate a peak hold image data set from said image data sets at a same shot position; and

a joint processing ~~portion unit that generates~~ configured to generate said given image data set by jointing said peak hold image data sets at different shot positions.

Claim 14 (Currently Amended): The X-ray diagnostic apparatus according to claim 10, wherein said system controller is configured to move said imaging system ~~moves~~ by a

movement unit that is longer than a radius of the field of view of said imaging system and shorter than a diameter of the field of view of said imaging system.

Claim 15 (Currently Amended): The X-ray diagnostic apparatus according to claim 10, wherein said system controller is configured to repeat shots ~~are repeated~~ an equal number of times at each suspended position.

Claim 16 (Currently Amended): An X-ray diagnostic apparatus, comprising:
an imaging system ~~that generates~~ configured to generate image data sets from shots by subjecting a patient to X-ray exposure;
a supporting mechanism ~~that supports~~ configured to generate said imaging system in such a manner so as to be allowed to move relatively with respect to said patient;
a system controller ~~that controls~~ configured to control said imaging system and said supporting mechanism so as to generate a plurality of first image data sets at different shot times, all corresponding to a first shot position, and a plurality of second image data sets at different shot times, all corresponding to a second shot position; and
an image processing ~~portion unit~~ unit that generates configured to generate a single third image data set covering a range wider than a field of view of said imaging system from said first and second image data sets, comprising,
a subtraction unit configured to subtract corresponding mask image data sets from said image data sets,
an addition processing unit configured to generate an addition image data set by adding up said image data sets at a same shot position, and
a joint processing unit configured to generate said given image data set by jointing said addition image data sets at different shot positions.

Claim 17 (Currently Amended): The X-ray diagnostic apparatus according to claim 16, wherein ~~said image processing portion includes:~~

[[an]] said addition processing ~~portion unit~~ that generates configured to generate a single first addition image data set by adding up said plurality of first image data sets and ~~generates to generate~~ a single second addition image data set by adding up said plurality of second image data sets; and

[[a]] said joint processing ~~portion unit~~ that generates configured to generate said third image data set by jointing said first addition image data set and said second addition image data set according to the first and second shot positions.

Claim 18 (Currently Amended): The X-ray diagnostic apparatus according to claim 16, wherein said image processing ~~portion unit~~ includes comprises:

a peak hold processing ~~portion unit~~ that generates configured to generate a single first peak hold image data set from said plurality of first image data sets and ~~generates to generate~~ a single peak hold image data set from said plurality of second image data sets; and

[[a]] the joint processing ~~portion unit~~ is configured to generate said third image data set by jointing said first peak hold image data set and said second peak hold image data set according to the first and second shot positions.